

# Interviews with Lifelong Readers: Preliminary Findings from the EDITS (Effects of Digital Information Technology on Seniors) Project

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## Abstract

This poster outlines the preliminary findings of the EDITS study: an inquiry into the digital information habits of senior citizens. The research presented here will focus on the adoption of ereading technology by seniors in order to determine the habits and attitudes, motivations, and barriers experienced by this demographic. Employing semi-structured interviews and the Unified Theory of Acceptance and Use of Technology (UTAUT), this study aims to investigate one element of the digital divide that sometimes goes unnoticed: age. Despite ingrained habits based on print, findings show motivations, such as convenience, contribute to the adoption of ereading by seniors.

**Keywords:** seniors, e-books, e-reading, tablets

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## 1 Introduction

Studies of the digital divide in Canada show that seniors are lagging behind in access to the Internet, skill level, and use of social media (Quan-Haase, Haight, & Corbett, 2013). As individuals who did not grow up with computers or other digital tools, this population finds it harder to fully emerge themselves into the digital realm. While children born today may be exposed to such technology from birth, seniors have had to adapt to many changes throughout their lives and make choices about the adoption of various digital technologies. Studies show that many seniors embrace these changes and are eager to learn (Nasmith & Parkinson, 2008), however, some are naturally more resistant.

Reading is a unique practice that is culturally and socially ingrained in a person's everyday life. Seniors are a large demographic of readers: survey research shows that seniors identify reading as both "enjoyable" (Ngandu & O'Rourke, 1979) and "very important to them" (Dettlaff-Lubiejewska, 2008). Reading preferences and practices developed over a lifespan can be difficult habits to break. To examine these habits, we ask the following questions: How do seniors approach ereading? Are they hesitant to change their reading habits or are they willing to try digital tools and read etexts? Investigating these research questions is important because texts are increasingly available in digital formats on computers, smartphones, tablets, and dedicated ereaders (Burritt, 2010).

The following research questions will be addressed:

- 1) How have ebooks changed the reading habits of seniors?
- 2) What motivates seniors to use ebooks in their reading for pleasure?

## 2 Literature Review

Previous research has examined the attitude of readers towards ebooks (Burritt, 2010; Chou et al, 2010), ebooks in historians' scholarship (Martin & Quan-Haase, 2013), changes in ereading behavior (Liu, 2005, Gardiner & Musto, 2002), the paper-digital divide (Luff et al, 2004), the design of ebooks (Luff et al, 2004),

and ebooks and publishing (Tian & Martin, 2010). While little work has been done specifically on seniors and digital reading, there has been research conducted on their Internet use (Quan-Haase, et al., 2013). Peacock and Kunemund (2007) note that “lack of a device, motivational indifference and deficient knowledge are the main reasons behind non-usage of the Internet by seniors” (p. 198). Similarly, Morris, Goodman and Brading (2007) found that seniors were unaware of the Internet, were afraid to use it, or felt that they were getting too old to be bothered with the technology. Regardless, research has been done that looks at how to meet seniors information needs in the changing digital environment (Godfrey & Johnson, 2009; Campbel, 2008).

As readers, senior citizens have been the focus of studies about reading habits, attitudes, and motivation (Ngandu & O'Rourke, 1979; Robinson, 1980; Scales & Biggs, 1983; Schutte & Malouff, 2007). These studies reveal that factors, such as education, income, socioeconomic status, ethnicity, and sex, contribute to reading patterns and motivation (Grubb, 1982; Kling, 1982). Extensive studies have also been conducted on the specific problems faced by senior readers, their reading needs, and how the library can facilitate solutions and programs that address the issues and requirements of seniors (Carsello & Creaser, 1981; Romani, 1983; Herr & Bridgland, 1989; Anderson et al., 1992; Dettlaff-Lubiejewska, 2008). While many of these studies identify issues such as impaired vision, reduced hearing, memory loss, diminished mental acuity, and limited mobility, only a few address the affects of seniors in a digital reading environment and the unique challenges and possibilities of digital technology in overcoming these issues. Ordonez et al. (2011) investigate the effects of a digital inclusion program on the cognitive performance of elderly adults such as orientation and attention, memory, verbal fluency, language, and visio-spatial skills. Their findings suggest that the acquisition of knowledge and the use of digital tools may bring cognitive gains. Those studies that address the shift towards digital reading do not look broadly at adoption but, rather, focus on the development of specific programs and services that address barriers of elderly reading. Solutions to these barriers are examined in the development of educational programs (Irizarry et al., 1997; Bean, 2003) or the adaptive design of digital products such as video games and websites (Pernice & Nielsen, 2001; Ijsselstein et al., 2007).

### 3 Theoretical Framework

The Unified Theory of Acceptance and Use of Technology (UTAUT) was used as a framework for analysis. This theory presents four constructs (performance expectancy, effort expectancy, social influence, and facilitating conditions) (Venkatesh et al., 2003) and identifies gender, age, experience, and voluntariness as moderators of the four constructs. Age is the only moderator to affect all four constructs. As age is a defining parameter of the senior demographic this theory works well to establish how age affects the acceptance of ereading.

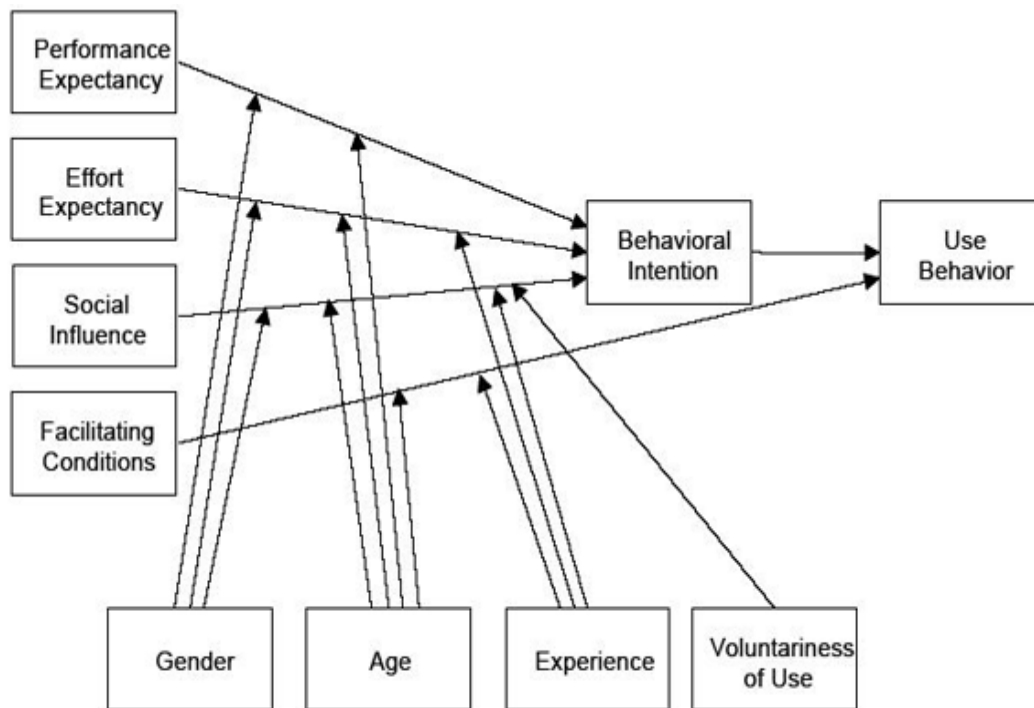


Figure 1: UTAUT Model (Source: Venkatesh et al., 2003)

#### 4 Methods

Semi-structured interviews were conducted with 15 seniors (ages 60+) between September 2012 and June 2013 in London, Ontario, Canada. Participants were recruited through posters and information sessions at local events for seniors. Analysis employed grounded theory modeled after the approach outlined by Charmaz and Belgrave (2003) and Charmaz (2006).

Theme	Subtheme	Definition	Example
Traditional notions of books and reading	Physicality of print books	The look and feel of print media.	S 11: "I like the tactile experience of holding a book."
	Ingrained habits	Nostalgia and reluctance to depart from established reading habits.	S 15: "Well, I suppose it's habit. It's gone on a long time, you know. Um, I'm not—I find it more difficult to read stuff on screen—you know, on the computer screen. Um, and maybe it's because I haven't done enough of it. I tend to—it takes the joy out of reading."
	Ebooks are for young people	Belief that they are too old to enjoy ereading, or to learn the technology required for reading digitally.	S 14: "...the younger generation is probably more comfortable doing everything with the computer, whereas I'm not."
Convenience of ebooks and ereading devices	Portability	The portability of ebooks and the ability to carry multiple ebooks on one device.	S 12: "Now, Ken Follet's books are big and heavy. I think an ereader would probably be a lot easier in that respect."
	Travel	The ability to take many ebooks when traveling as opposed to one print book.	S 12: "I don't have an ereader. Um, I would like to get one. And I think it's convenient to take a ereader with a number of books on it travelling, because I do like to travel. Rather than carry the bulkiness of a book." S 11: "They're convenient when you're travelling, for example." S 10: "Yeah, so that is great for travel. I could say I prefer it for travel."
Influence of Internet	Trust of Internet and electronic purchasing	Trust plays a role in whether they purchase online or not.	S 11: "I can't tell you why. I just don't feel comfortable, so I don't do it."
	Digital reference materials	Enewsletters, or library bulletins that affect reading material choice.	S 14: "Because I subscribe to a, um [pause] a newsletter. An American newsletter, <i>Book Browse</i> , on new books and book reviews, so probably, um, more aware of more American publications that I might put on my to-read list than I would otherwise, having just [pause] read reviews in <i>McLeans</i> or <i>The Globe</i> or something like that, which would be more Canadian-oriented. So I suppose it's changed maybe that... little bit."
	Availability of reading materials	The internet is used to check the availability of reading materials at bookstores and/or libraries.	S 11: "Um, no, I'll look up online to see the availability..." S 9: "I have also gone online at home so that I can reserve books." S 2: "When you go on the main website to, um check the catalogue, or to put a book on hold, y'know there's always a little sidebar thing telling you about what's going on, so I've seen it there as well."
Interest in digital reading		Expressed an interest in trying an ereader.	S 11: "I would be open to trying one. Just to see—just to experience it." S 12: "I don't have an ereader. Um, I would like to get one."

Table 1: Preliminary coding chart

## 5 Findings

### 5.1 Habits

In general, seniors report that ebooks have not changed their reading habits, as they continue to rely on print books, newspapers, magazines, etc. Nonetheless, they also report that they rely on a wide range of digital materials. Although a number of the seniors do not read ebooks, they do obtain information about print books through digital means. For instance, they read summaries and recommendations on the Internet or newsletters. They also acquire logistic information about libraries and stores from electronic sources. These additional digital resources help seniors make their reading selections. Further, even those who read exclusively in print obtain books through online purchasing or reserve library books online because that is

often most convenient for them. Hence, the digital is playing a central role in supplementing information and print reading habits.

## 5.2 Attitudes

Seniors are still reluctant about digital reading and in particular reading entire books in digital formats. However, some seniors expressed interest in obtaining an ereader and starting to explore the experience and features of digital reading. They were open to new forms of reading and thought it could provide them with alternative means of accessing information and reading books. Yet, a majority of seniors were reluctant to adopt ereaders and preferred to leave digital reading to younger generations claiming that it is a good thing for young people but not for them. Surprisingly though they were comfortable using email, Google, and other sites, but felt that reading at length was something they would rather do in print.

## 5.3 Motivations

Convenience is cited as a large motivator for seniors to use ebooks. Those that do read ebooks enjoy both the portability of ebooks as well as the easy customization of font size and backlighting which overcomes issues, such as impaired vision. Further, many of the seniors who do not read ebooks assert that it seems very convenient especially for travel and some indicate a willingness to try ebooks in order to gain that and other practical affordances. However, despite some motivation and willingness there is still a dedication to the familiarity of print books. Even those who use tablets and ereaders sometimes prefer the physicality — look and feel — of print. Hence, digital reading is in most cases done in addition to print reading.

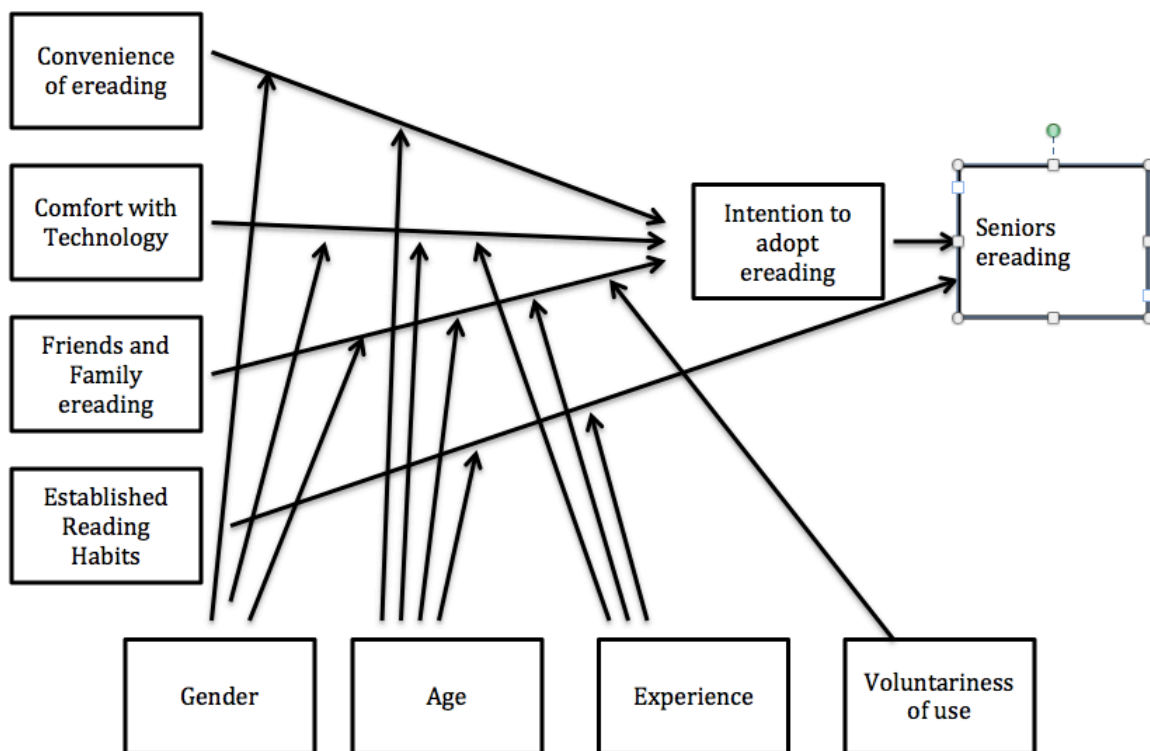


Figure 2: Tentative UTAUT for seniors ereading model

## 5.4 Barriers

Familiarity with technology, such as the regular use of computers, contributes to seniors' decision to read digitally. Hence, the low digital literacy levels of seniors can be a barrier to the adoption of ereaders. Findings show that lack of trust in digital technologies such as the Internet, especially in regards to online

purchasing, as well as limited knowledge about and experience with devices such as tablets and ereaders contribute to seniors' adoption of digital reading.

## 6 Conclusion

As digital reading evolves and increases in popularity, it will continue to affect each demographic of readers in different ways. Scholarship detailing the use of technology by seniors shows that while they may be trends towards acceptance, many members of this population do not feel comfortable or knowledgeable about technology. As is evident in the existing literature identifying the information needs of seniors and positing solutions to perceived problems, the knowledge gained in this project will aid in library collection and program development, industry practices, and technology development for this growing population. Considering the number of senior citizens in the current population and their affinity with reading, ebook designers and ereader marketers could benefit from the following findings:

1. Seniors desire clear features for sharing ebooks with friends (potentially via email, as this is an area of the Internet where they are comfortable).
2. Seniors should be made aware of the ereaders capability for keeping track of their reading habits. Many seniors keep a log of what they have read and their thoughts on the book, author, period, etc., and are not aware of these features of ereaders. This could also be an added form of social media that readers could share with friends, or members of bookclubs, etc.
3. Features that aid visual impairment (such as text enlargement and font selection) and night reading (reading in bed) should be prominent in marketing ereaders to seniors and educating seniors about ereaders. Seniors often read before bed and are receptive to features that facilitate that reading habit.

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